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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,824	12/02/2003	Masao Fukami	245618US3CONT	2726
22850 7590 09/28/2007 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER LOPEZ, CARLOS N	
			ART UNIT 1731	PAPER NUMBER
			NOTIFICATION DATE 09/28/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/724,824	Applicant(s) FUKAMI ET AL.	
	Examiner /Carlos Lopez/	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/5/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11, 14-16, 18, 20, 21 and 23 is/are allowed.
- 6) ☒ Claim(s) 13, 17, 19 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Allowable Subject Matter

The indicated allowability of claim 22 is withdrawn in view of the newly discovered reference(s) to US 5,437,703. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 13 and 22 are rejected under 35 U.S.C. 102(b) as anticipated by Jacques et al US 5,437,703 (703). 703 disclose a bending sheet process and means for bending the glass sheet. The process comprises heating the glass sheet to its bending temperature; subjecting the glass sheet to an initial gravity bending step; and then subjecting the glass sheet to a press bending step. The pre-bending is done with a frame unit 3 comprised of a fixed frame 5 and a movable frame 6 pivoted onto fixed frame 5. In regards to the claimed upper mold, mold 4 has a bending surface facing

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downward in a substantially vertical direction. 730 is silent using the frame unit to control the amount of pre-bending. However, the degree at which the movable frame 6 is angled would control the amount of bending caused to the glass sheet during the preliminary bending. Hence, the claimed means for controlling the amount of preliminary bending is deemed as Jacques frame unit 3 having a movable fix frame 6.

Claim 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacques et al US 5,437,703 (703). Jaques is silent placing the frame having the means for controlling the amount of preliminary bending and the upper mold in a heating furnace. However, the Supreme Court decision in KSR International Co. v. Teleflex Inc., 550 U.S. 820 USPQ2d 1385 (2007) has held that “a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product of not innovation but of ordinary skill and common sense.” In the instant case the placing of the frame unit and mold in heating furnace would allow the glass to be preliminary bent and fully bended at one location, within the heating furnace and because it is within the furnace, it would avoid subjecting the glass sheet to temperature changes that may affect the bending process. Hence, the placement of the mold and frame unit within a furnace would have been obvious to a person of ordinary skill in the art to try because the claimed modification are within grasp of a person of ordinary skill in the art with an expectation that the glass bending will be achieved.

In regards to claim 19, the use of suction by providing holes to the upper mold is known in the art. The Supreme Court decision in KSR International Co. v. Teleflex

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Inc., 550 U.S. 820 USPQ2d 1385 (2007) has held that "the combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." In the instant case, the art already provides holes to the upper mold in order to create suction to assure the glass is in full contact with the upper mold. The full contact of the upper mold to the glass, assures that the glass takes the full shape of the upper mold. Hence, the combination of the noted familiar element in the art with Jacques upper mold would provide the predictable result of assuring the glass sheet fully takes the shape of the upper mold without unexpected results/yields predictable results.

Allowable Subject Matter

Claims 11, 14-16, 18, 20-21, and 23 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is 571.272.1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carlos Lopez/
Primary Examiner
Art Unit 1731

CL